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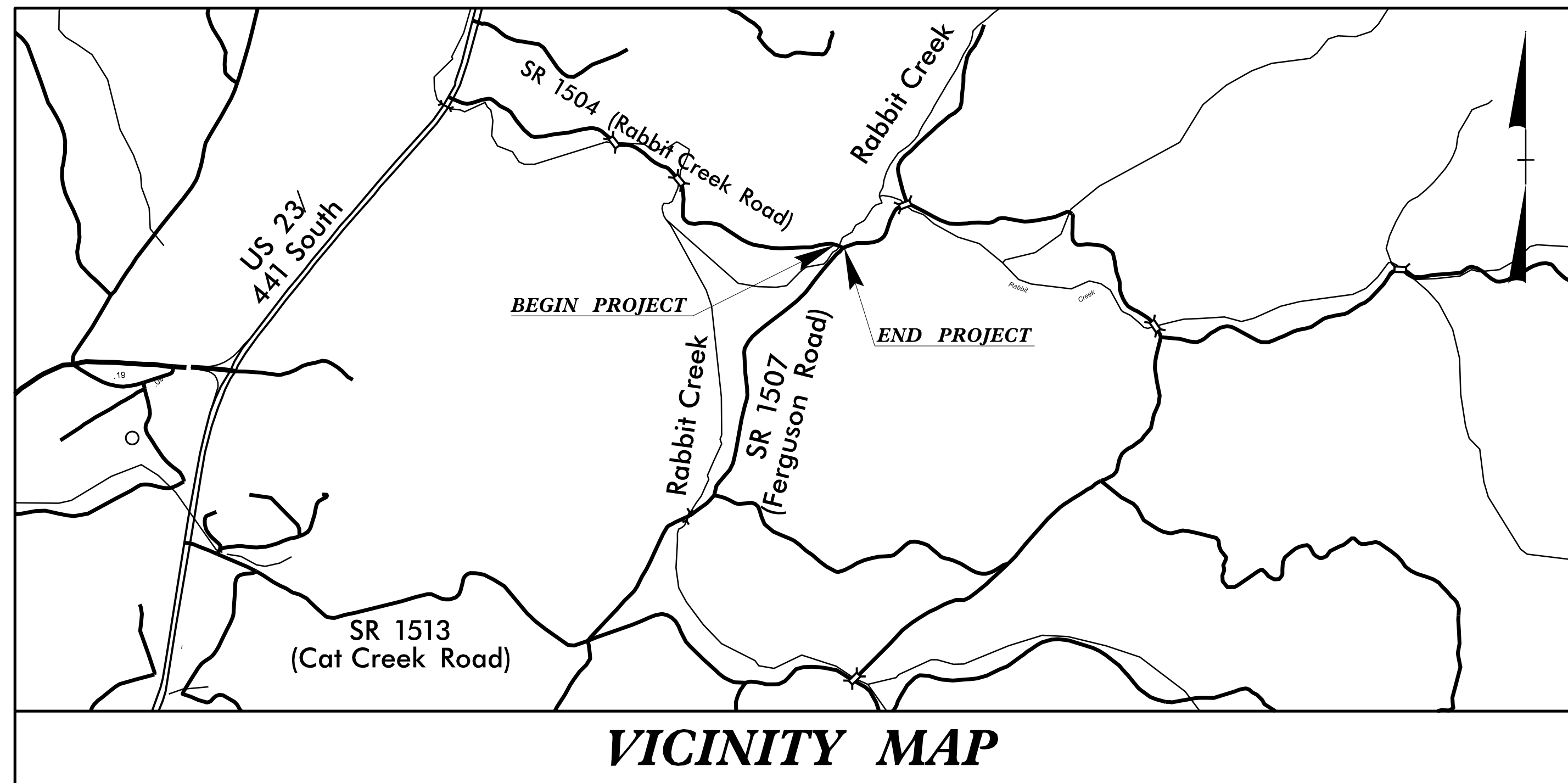
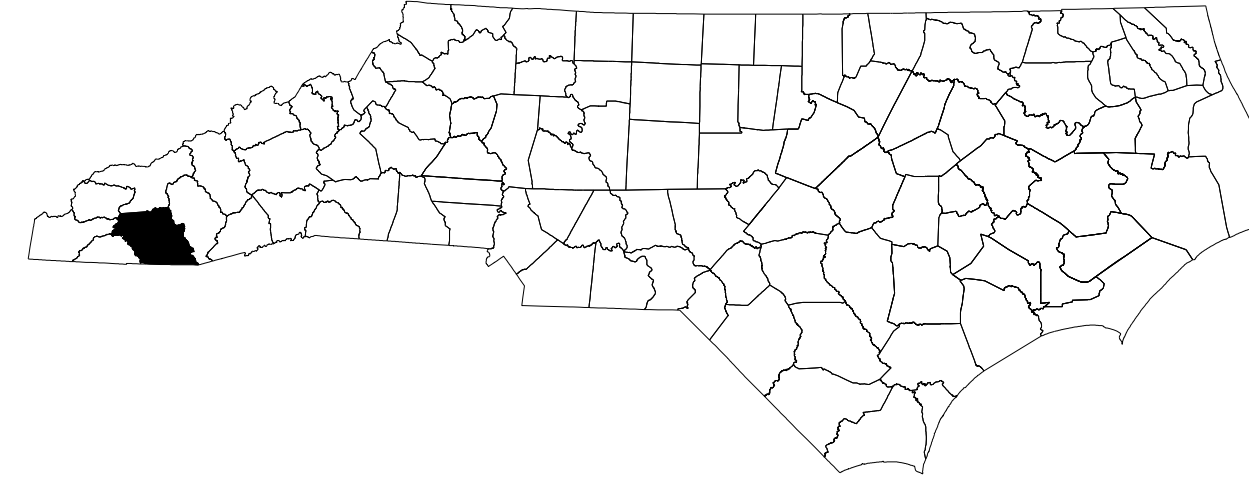
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STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**TRANSPORTATION MANAGEMENT PLAN**

**MACON COUNTY**

**BRIDGE NO: 67 ON SR 1504 (RABBIT CREEK ROAD) OVER RABBIT CREEK**



**VICINITY MAP**

**INDEX OF SHEETS**

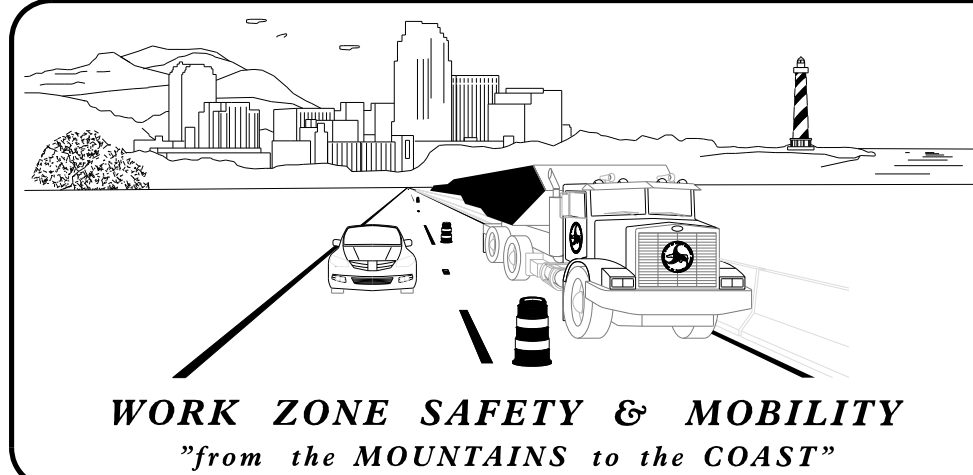
<u>SHEET NO.</u>	<u>TITLE</u>
TMP-1	TITLE SHEET, VICINITY MAP, AND INDEX OF SHEETS
TMP-1A	ROADWAY STANDARD DRAWINGS AND LEGEND
TMP-2	TRANSPORTATION OPERATIONS PLAN
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SHEET NO.

TMP-1

**TIP PROJECT: B-5406**

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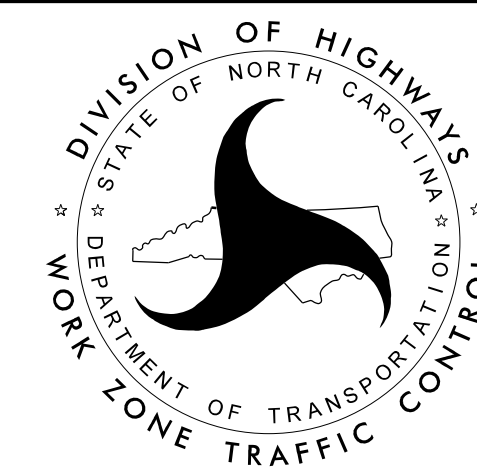
**N.C.D.O.T. WORK ZONE TRAFFIC CONTROL**  
1561 MAIL SERVICE CENTER (MSC) RALEIGH, NC 27699-1561  
750 N. GREENFIELD PARKWAY, GARNER, NC 27529 (DELIVERY)  
PHONE: (919) 814-5000 FAX: (919) 771-2745

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**STATE TRAFFIC MANAGEMENT ENGINEER**

**D.A. PARKER, P.E.**      **TRAFFIC CONTROL PROJECT ENGINEER**

**R.M. GARRETT**        **TRAFFIC CONTROL PROJECT DESIGN ENGINEER**

\_\_\_\_\_  
**TRAFFIC CONTROL DESIGN ENGINEER**



Prepared in the Office of:

**RAMEY KEMP ASSOCIATES, INC.**  
Transportation Engineers  
5808 Faringdon Place, Suite 100  
Raleigh, North Carolina 27609  
919-872-5115 Tel. 919-878-5416 Fax.  
www.rameykemp.com  
NC License No. C-0910

APPROVED: William J. Hamilton

DATE: 11/29/2017

SEAL

# ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS SHOWN IN "ROADWAY STANDARD DRAWINGS" - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2018 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1101.01	WORK ZONE ADVANCE WARNING SIGNS
1101.03	TEMPORARY ROAD CLOSURES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1130.01	DRUM
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO-LANE AND MULTI-LANE ROADWAYS
1205.12	PAVEMENT MARKINGS - BRIDGES
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1251.01	RAISED PAVEMENT MARKERS - PERMANENT AND TEMPORARY
1261.01	GUARDRAIL AND BARRIER DELINEATORS - INSTALLATION SPACING
1261.02	GUARDRAIL AND BARRIER DELINEATORS - TYPES AND MOUNTING
1262.01	GUARDRAIL END DELINEATION
1264.01	OBJECT MARKERS - TYPES
1264.02	OBJECT MARKERS - INSTALLATION

# LEGEND

## GENERAL

- DIRECTION OF TRAFFIC FLOW
- DIRECTION OF PEDESTRIAN TRAFFIC FLOW
- EXIST. PVMT.
- NORTH ARROW
- PROPOSED PVMT.
- TEMP. SHORING (LOCATION PURPOSES ONLY)

WORK AREA

REMOVAL

WEDGING

## SIGNALS

- EXISTING
- PROPOSED
- TEMPORARY

## PAVEMENT MARKINGS

- EXISTING LINES
- TEMPORARY LINES

## TRAFFIC CONTROL DEVICES

- BARRICADE (TYPE III)
- CONE
- DRUM
- SKINNY DRUM
- TUBULAR MARKER
- TEMPORARY CRASH CUSHION
- FLASHING ARROW BOARD
- FLAGGER
- LAW ENFORCEMENT
- TRUCK MOUNTED ATTENUATOR (TMA)
- CHANGEABLE MESSAGE SIGN

## TEMPORARY SIGNING

- PORTABLE SIGN
- STATIONARY SIGN
- STATIONARY OR PORTABLE SIGN

## PAVEMENT MARKERS

- CRYSTAL/CRYSTAL
- CRYSTAL/RED
- YELLOW/YELLOW

## PAVEMENT MARKING SYMBOLS

- PAVEMENT MARKING SYMBOLS

## TEMPORARY PAVEMENT MARKING

- P1 YELLOW DOUBLE CENTER PAINT (4") LF
- P2 WHITE STOP BAR PAINT (24") LF

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APPROVED: DATE: 11/29/2017 SEAL			<h2>ROADWAY STANDARD DRAWINGS &amp; LEGEND</h2>
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## GENERAL NOTES

CHANGES MAY BE REQUIRED WHEN PHYSICAL DIMENSIONS IN THE DETAIL DRAWINGS, STANDARD DETAILS, AND ROADWAY DETAILS ARE NOT ATTAINABLE TO MEET FIELD CONDITIONS OR RESULT IN DUPLICATE OR UNDESIRED OVERLAPPING OF DEVICES. MODIFICATION MAY INCLUDE: MOVING, SUPPLEMENTING, COVERING, OR REMOVAL OF DEVICES AS DIRECTED BY THE ENGINEER.

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT EXCEPT WHEN OTHERWISE NOTED IN THE PLAN OR DIRECTED BY THE ENGINEER.

### LANE AND SHOULDER CLOSURE REQUIREMENTS

- A) REMOVE LANE CLOSURE DEVICES FROM THE LANE WHEN WORK IS NOT BEING PERFORMED BEHIND THE LANE CLOSURE OR WHEN A LANE CLOSURE IS NO LONGER NEEDED OR AS DIRECTED BY THE ENGINEER.
- B) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 15 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN SHOULDER USING ROADWAY STANDARD DRAWING NO. 1101.04 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL OR A LANE CLOSURE IS INSTALLED.
- C) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO AN UNDIVIDED FACILITY AND WITHIN 5 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.  
  
 WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO A DIVIDED FACILITY AND WITHIN 10 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.
- D) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN A LANE OF TRAVEL OF AN UNDIVIDED OR DIVIDED FACILITY, CLOSE THE LANE ACCORDING TO THE TRAFFIC CONTROL PLANS, ROADWAY STANDARD DRAWINGS, OR AS DIRECTED BY THE ENGINEER. CONDUCT THE WORK SO THAT ALL PERSONNEL AND/OR EQUIPMENT REMAIN WITHIN THE CLOSED TRAVEL LANE.
- E) DO NOT WORK SIMULTANEOUSLY WITHIN 15 FT ON BOTH SIDES OF AN OPEN TRAVELWAY, RAMP, OR LOOP WITHIN THE SAME LOCATION UNLESS PROTECTED WITH GUARDRAIL OR BARRIER.

### PAVEMENT EDGE DROP OFF REQUIREMENTS

- F) BACKFILL AT A 6:1 SLOPE UP TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT IN AREAS ADJACENT TO AN OPENED TRAVEL LANE THAT HAS AN EDGE OF PAVEMENT DROP-OFF AS FOLLOWS:  
  
 BACKFILL DROP-OFFS THAT EXCEED 2 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS OF 45 MPH OR GREATER.  
  
 BACKFILL DROP-OFFS THAT EXCEED 3 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS LESS THAN 45 MPH.  
  
 BACKFILL WITH SUITABLE COMPACTED MATERIAL, AS APPROVED BY THE ENGINEER, AT NO EXPENSE TO THE DEPARTMENT.
- G) DO NOT EXCEED A DIFFERENCE OF 2 INCHES IN ELEVATION BETWEEN OPEN LANES OF TRAFFIC FOR NOMINAL LIFTS OF 1.5 INCHES. INSTALL ADVANCE WARNING "UNEVEN LANES" SIGNS (W8-11) 200 IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

### TRAFFIC PATTERN ALTERATIONS

- H) NOTIFY THE ENGINEER TWENTY ONE (21) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

### SIGNING

- H) INSTALL ADVANCE WORK ZONE WARNING SIGNS WHEN WORK IS WITHIN 40 FT FROM THE EDGE OF TRAVEL LANE AND NO MORE THAN THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.
- J) PROVIDE SIGNING AND DEVICES REQUIRED TO CLOSE THE ROAD ACCORDING TO THE ROADWAY STANDARD DRAWINGS AND TRAFFIC CONTROL PLANS.  
  
 PROVIDE SIGNING REQUIRED FOR THE OFF-SITE DETOUR ROUTE AS SHOWN IN THE TRAFFIC CONTROL PLANS.
- K) COVER OR REMOVE ALL SIGNS AND DEVICES REQUIRED TO CLOSE THE ROAD WHEN ROAD CLOSURE IS NOT IN OPERATION.  
  
 COVER OR REMOVE ALL SIGNS REQUIRED FOR THE OFF-SITE DETOUR WHEN THE DETOUR IS NOT IN OPERATION.
- L) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.
- M) INSTALL BLACK ON ORANGE "DIP" SIGNS (W8-2) AND/OR "BUMP" SIGNS (W8-1) 200 FT IN ADVANCE OF THE UNEVEN AREA, OR AS DIRECTED BY THE ENGINEER.

### TRAFFIC CONTROL DEVICES

- N) WHEN LANE CLOSURES ARE NOT IN EFFECT SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER IN FEET THAN TWICE THE POSTED SPEED LIMIT (MPH) EXCEPT, 10 FT ON-CENTER IN RADII, AND 3 FT OFF THE EDGE OF AN OPEN TRAVELWAY. REFER TO STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES SECTIONS 1130 (DRUMS), 1135 (CONES) AND 1180 (SKINNY DRUMS) FOR ADDITIONAL REQUIREMENTS.
- O) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.

### PAVEMENT MARKINGS AND MARKERS

- P) INSTALL TEMPORARY PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKERS ON INTERIM LAYERS OF PAVEMENT AS FOLLOWS:

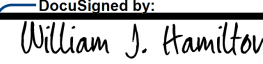
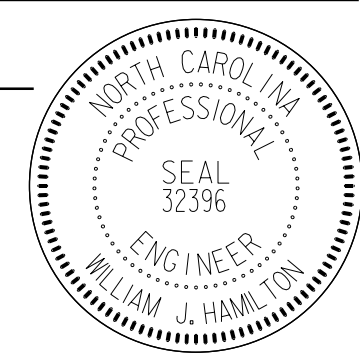

ROAD NAME	MARKING	MARKER
-L- SR 1504 (RABBIT CREEK ROAD)	PAINT	NONE
-Y1- SR 1507 (FERGUSON ROAD)	PAINT	NONE
-Y2- HOLLY SPRING ESTATES ROAD	PAINT	NONE

- Q) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.
- R) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.

### MISCELLANEOUS

- S) IN THE EVENT A TIE-IN CANNOT BE MADE IN ONE DAY'S TIME, BRING THE TIE-IN AREA TO AN APPROPRIATE ROADWAY ELEVATION AS DETERMINED BY THE ENGINEER. PLACE BLACK ON ORANGE "LOOSE GRAVEL" SIGNS (W8-7) AND BLACK ON ORANGE "PAVEMENT ENDS" SIGNS (W8-3) 250 FT AND 250 FT RESPECTIVELY IN ADVANCE OF THE UNEVEN AREAS. USE DRUMS TO DELINEATE THE EDGE OF ROADWAY ALONG UNPAVED AREAS.

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APPROVED:  DATE: 11/29/2017  SEAL 		<h1 style="margin: 0;">TRANSPORTATION OPERATIONS PLAN</h1>
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# PHASING

THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL EXISTING DRIVEWAYS.

### PHASE I (SEE SHEETS TMP-4 AND TMP-5)

STEP 1: INSTALL WORK ZONE ADVANCE WARNING SIGNS. (SEE RSD 1101.01)

STEP 2: USING FLAGGERS AS NEEDED, COMPLETE CONSTRUCTION FOR TEMPORARY TIE IN FOR DRIVEWAY AT -L- STA. 13+00 +/- .

STEP 3: WHILE MAINTAINING EXISTING TRAFFIC PATTERN, AWAY FROM TRAFFIC AND USING FLAGGER CONTROL AS NECESSARY, INSTALL TRAFFIC CONTROL DEVICES AS SHOWN ON TMP-4.

STEP 4: USING FLAGGERS AS NEEDED WHILE TRAFFIC IS MAINTAINED ON EXISTING ROUTES, COMPLETE CONSTRUCTION OF THE NEW ALIGNMENT FOR -Y1- (SR 1507) AND -Y2- INCLUDING DRAINAGE AS SHOWN ON TMP-4. DRAINAGE MUST BE MAINTAINED THROUGH EXISTING CULVERT FROM THE PROPOSED ALIGNMENT TO THE EXISTING 36" PIPE. NEW -Y1- ALIGNMENT TO BE CONSTRUCTED TO THE EXISTING EDGE AND ELEVATION OF -L- .

STEP 5: USING FLAGGERS, PERFORM THE FOLLOWING:  
 -PLACE TEMP. PAVEMENT MARKINGS ON -Y1- AND -Y2- TO MATCH FINAL PATTERN AS SHOWN ON FINAL PAVEMENT MARKING PLANS.  
 -REMOVE ANY CONFLICTING PAVEMENT MARKINGS ON -Y1- AND -Y2- .  
 -SHIFT TRAFFIC TO -Y1- (SR 1507) IN TWO LANE, TWO-WAY PATTERN AND CLOSE OLD ROADWAY TO TRAFFIC AS SHOWN ON TMP-5.

### PHASE II

COMPLETE THE WORK REQUIRED OF PHASE II, STEPS 1 THROUGH 3, WITHIN THE SUMMER MONTHS OF 2018 LYING OUTSIDE OF THE SCHOOL YEAR SCHEDULES(S). SEE INTERMEDIATE CONTRACT TIME AND LIQUIDATED DAMAGES

STEP 1: INSTALL OFF SITE DETOUR SIGNING AS SHOWN ON TMP-7 AND CLOSE -L- SR 1504 (RABBIT CREEK RD.) TO TRAFFIC. PLACE TEMPORARY STOP BAR AND STOP SIGN ON -L- AS SHOWN ON TMP-6.

STEP 2: REMOVE EXISTING BRIDGE, DRIVEWAYS AND ROADWAYS OF -L- AND -Y1- AS SHOWN ON TMP-6 AND CONSTRUCT THE PROPOSED BRIDGE, APPROACHES AND ROADWAY UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE.

STEP 3: USING FLAGGERS, PERFORM THE FOLLOWING:  
 -WEDGE -Y1- AND -L- PAVEMENTS UP TO BUT NOT INCLUDING THE FINAL SURFACE LAYER. SEE TMP-6 AND ROADWAY PLANS.  
 -PLACE TEMP. PAVEMENT MARKINGS ON -L- TO MATCH FINAL PATTERN AS SHOWN ON FINAL PAVEMENT MARKING PLANS.  
 -REMOVE ANY CONFLICTING PAVEMENT MARKINGS ON -L- .  
 -REMOVE ALL DEVICES NECESSARY FOR THE TEMPORARY DETOUR ROUTE INSTALLED IN STEP 1.  
 -OPEN -L- (SR 1504) TO TRAFFIC.

### PHASE III


STEP 1: USING FLAGGERS AS NEEDED, PLACE FINAL LAYER OF SURFACE COURSE AND FINAL PAVMENT MARKINGS AS SHOWN ON FINAL PAVEMENT MARKING PLANS.

STEP 2: REMOVE ALL TRAFFIC CONTROL DEVICES AND OPEN ALL ROADWAYS TO TRAFFIC.

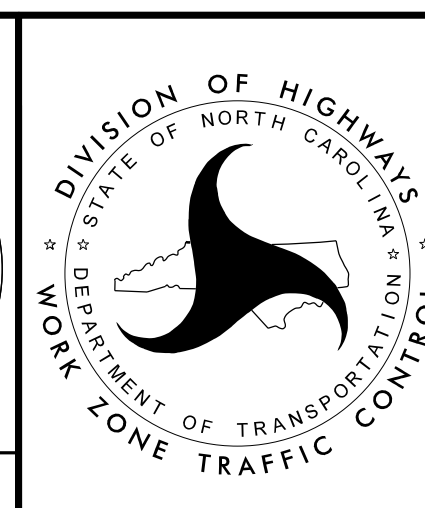
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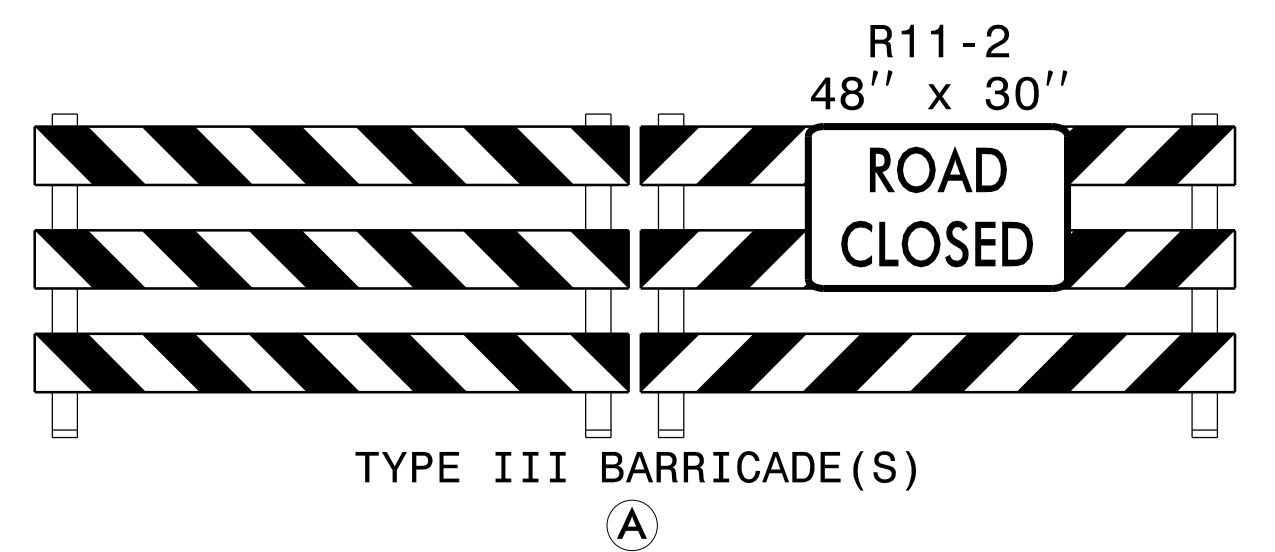
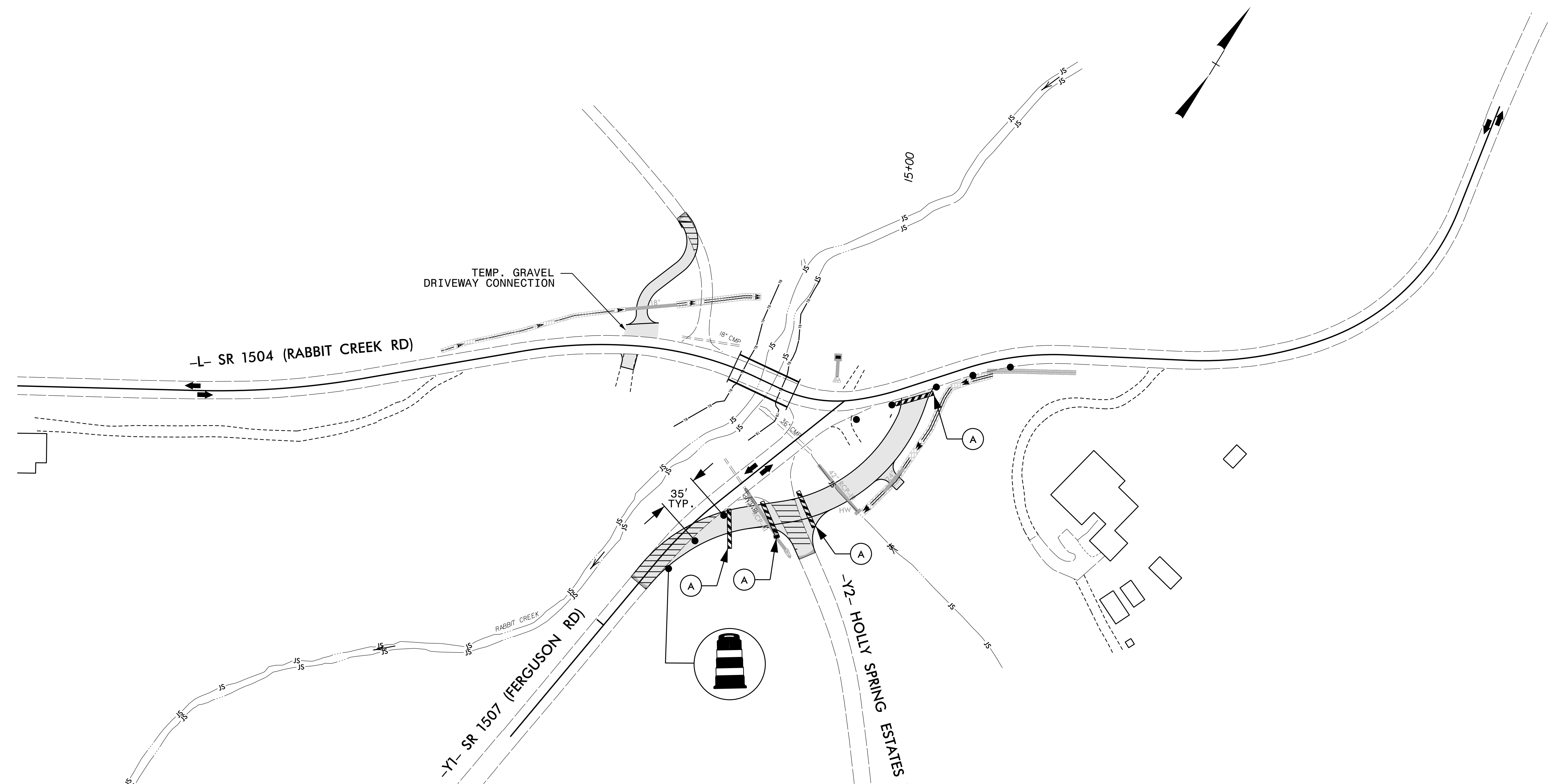


## TRAFFIC CONTROL PHASING NOTES



PROJ. REFERENCE NO.	SHEET NO.
B-5406	TMP-4

**RAMEY KEMP ASSOCIATES, INC.**  
 Transportation Engineers  
 5808 Farington Place, Suite 100  
 Raleigh, North Carolina 27609  
 919-872-5115 Tel. 919-878-5416 Fax.  
 www.rameykemp.com  
 NC License No. C-9910

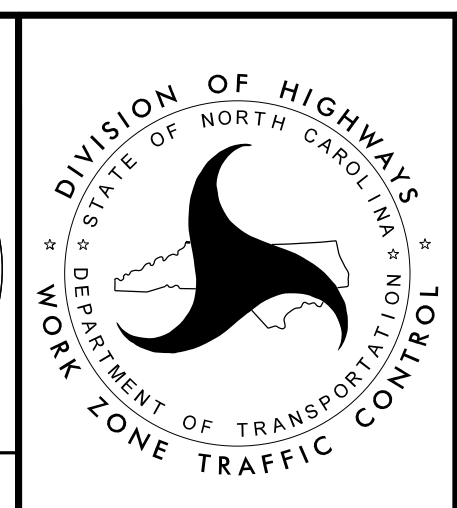


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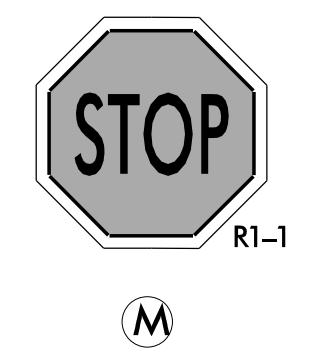
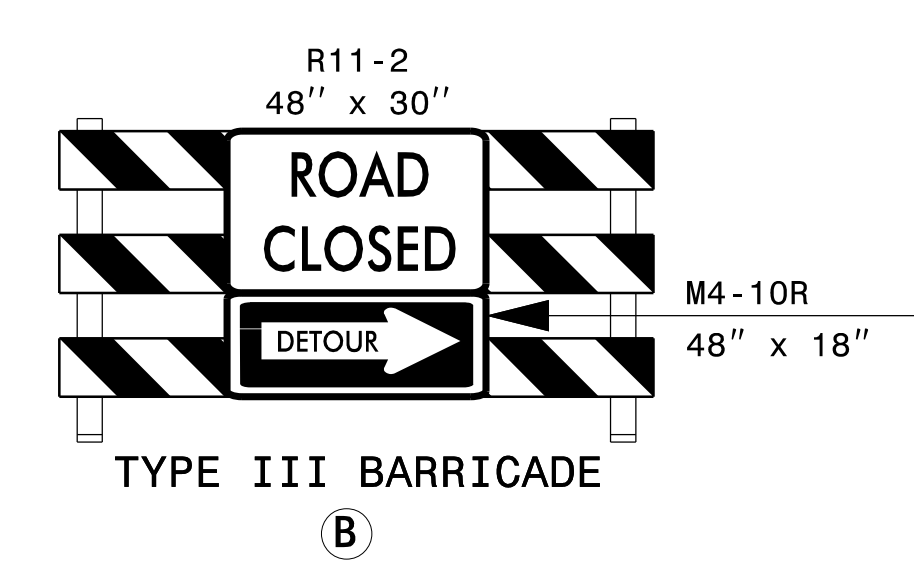
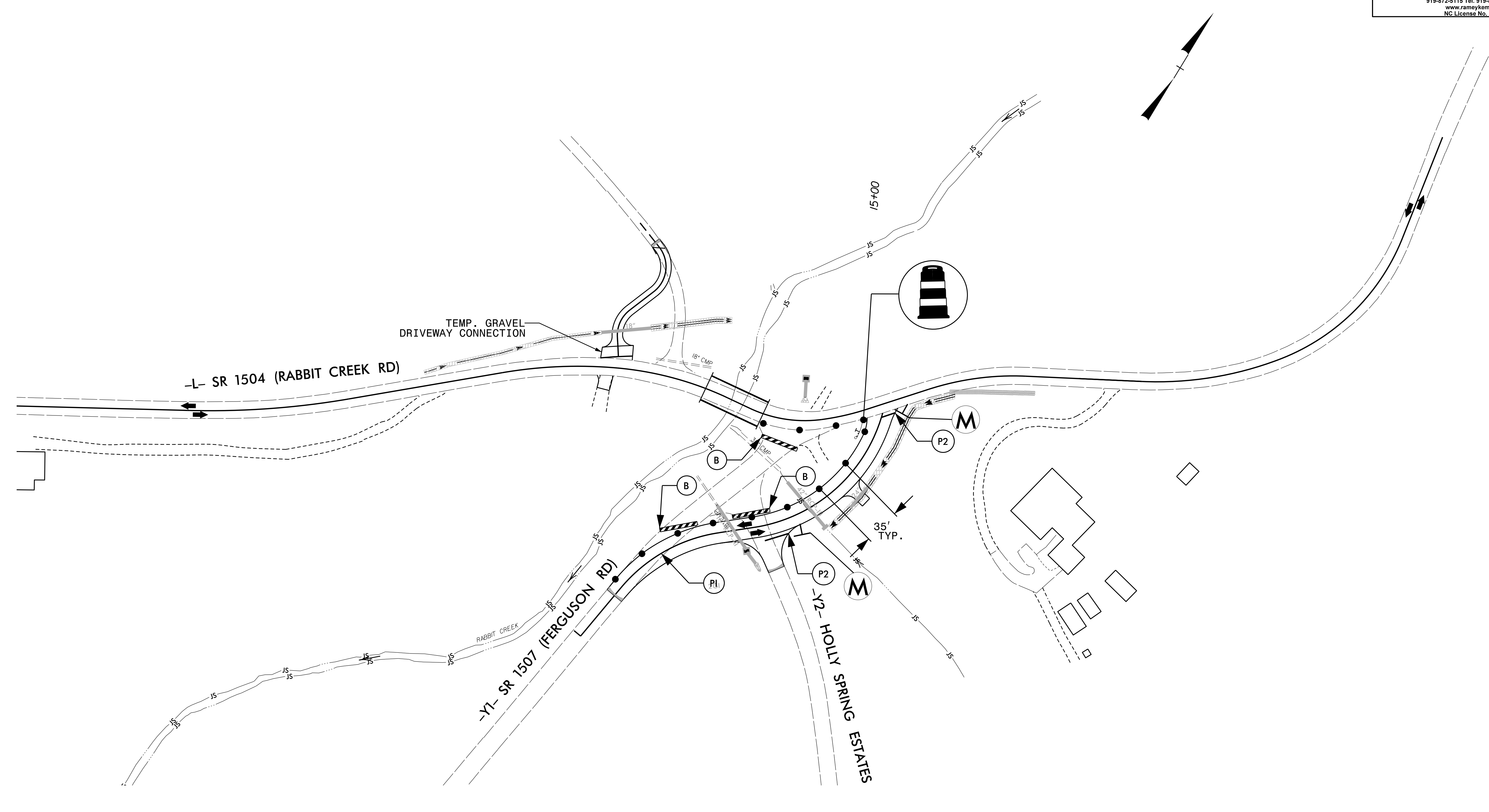
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 NORTH CAROLINA PROFESSIONAL ENGINEER  
 WILLIAM J. HAMILTON  
 32396



**TEMPORARY TRAFFIC CONTROL PHASE IA DETAIL**

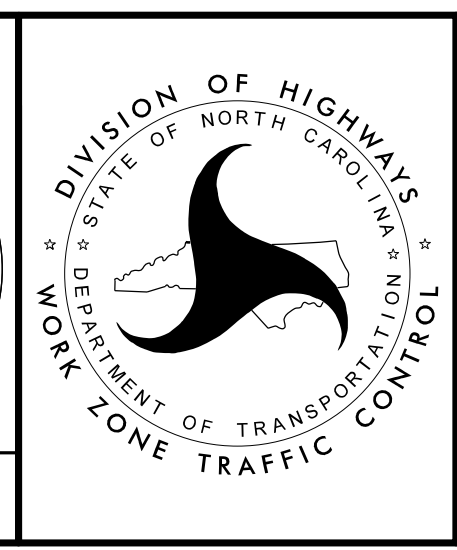
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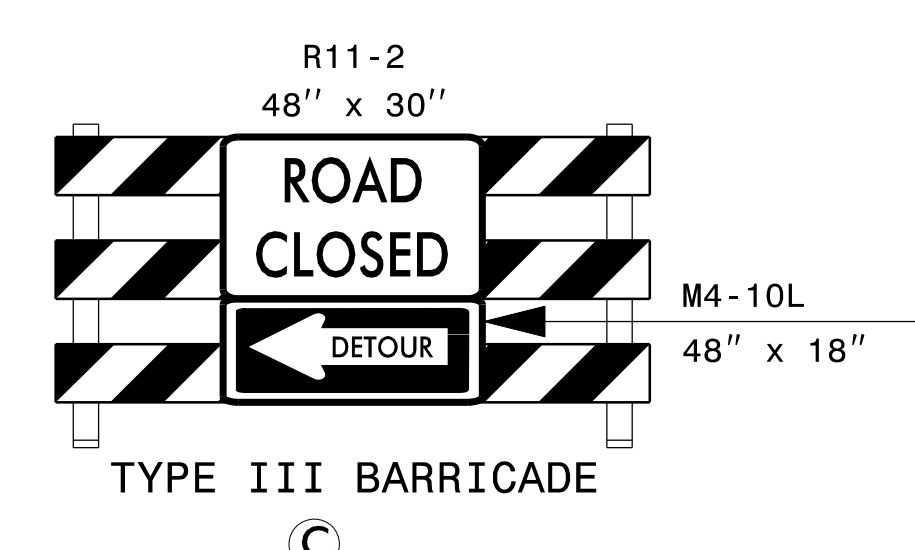
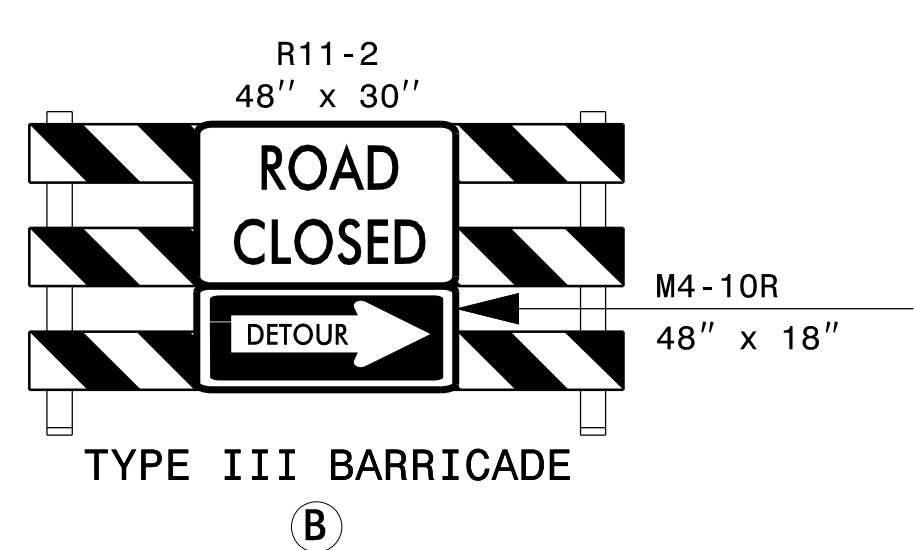
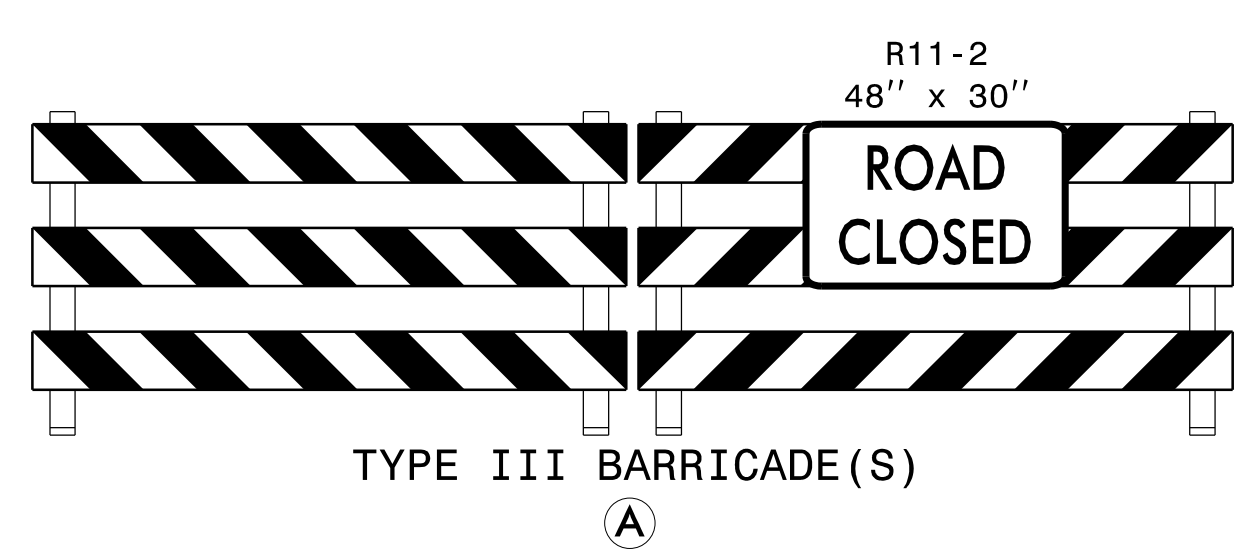
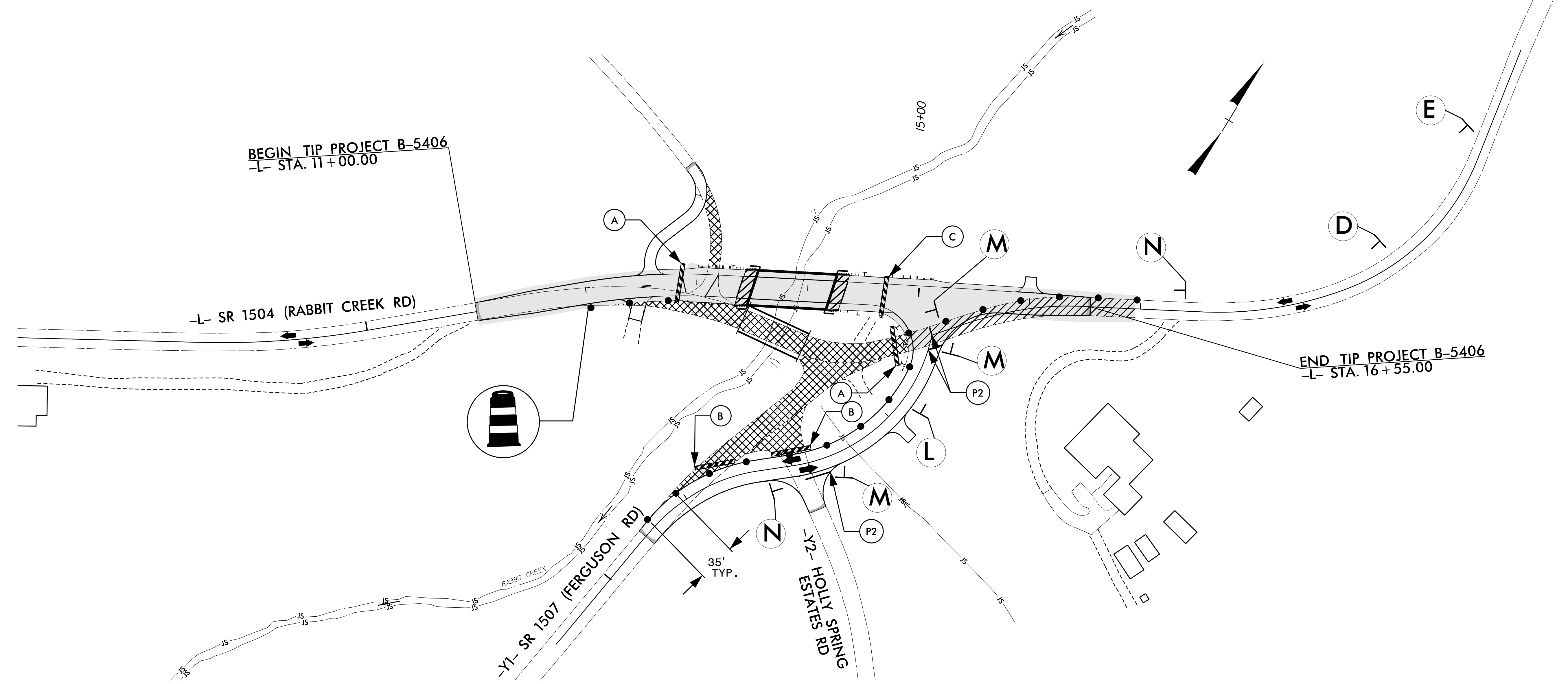
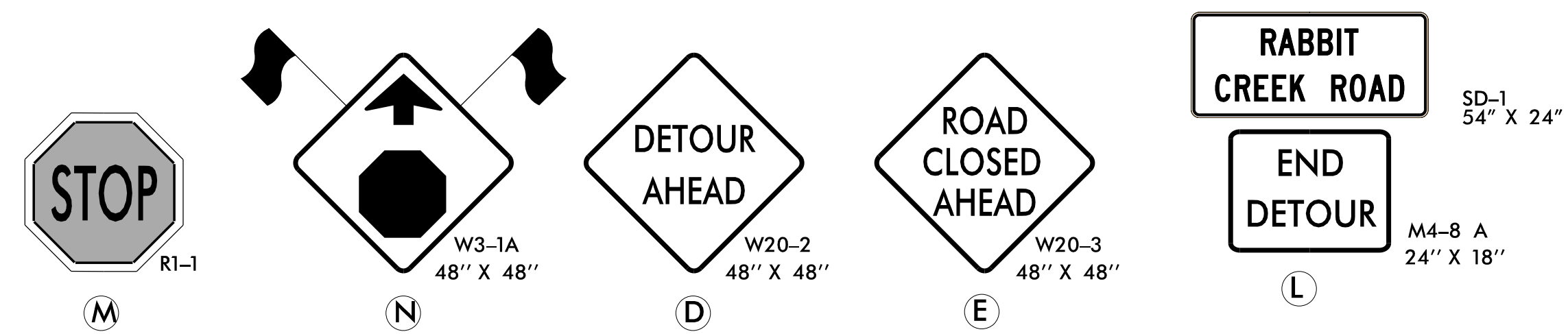
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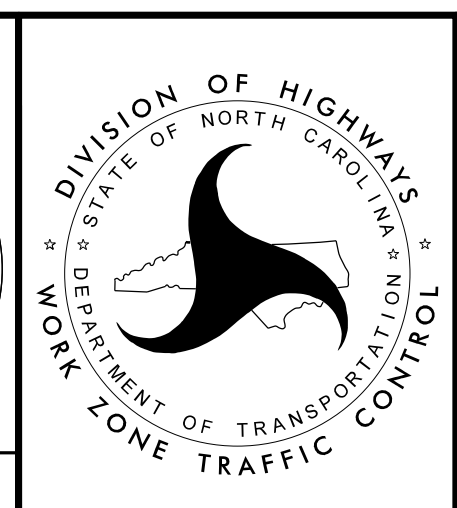
**TEMPORARY  
 TRAFFIC CONTROL  
 PHASE IB DETAIL**

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 WILLIAM J. HAMILTON  
 32396

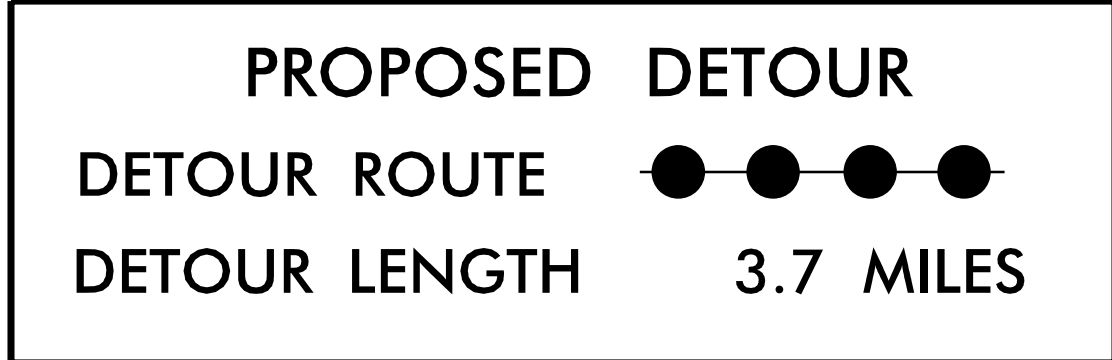
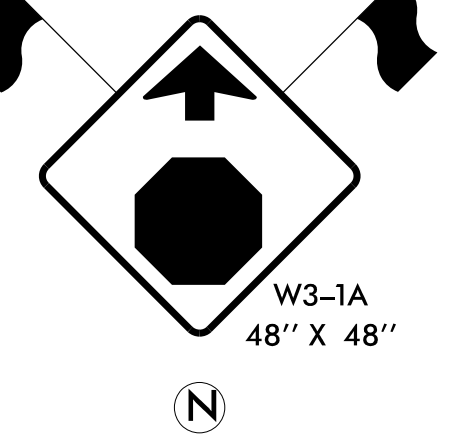
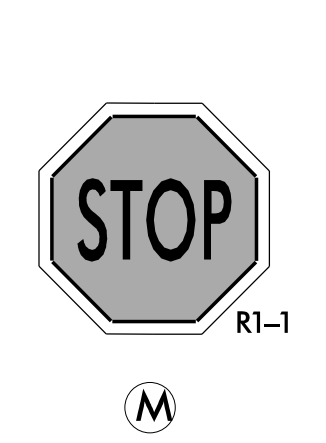
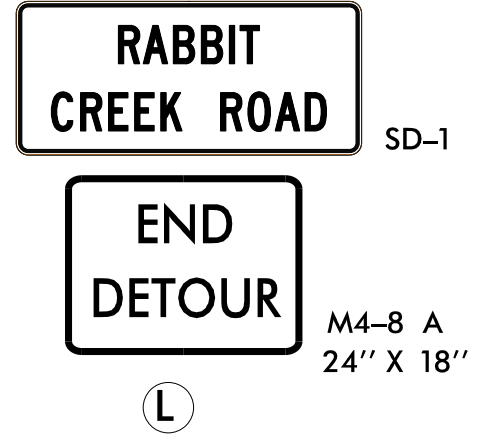
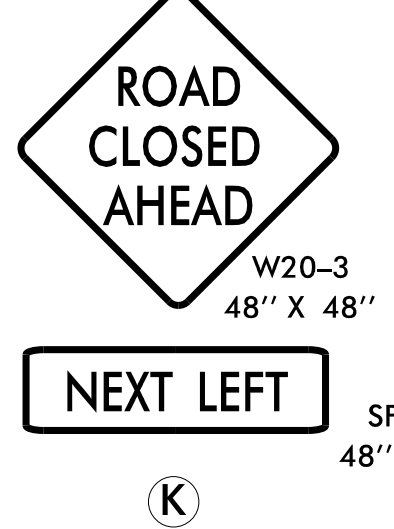
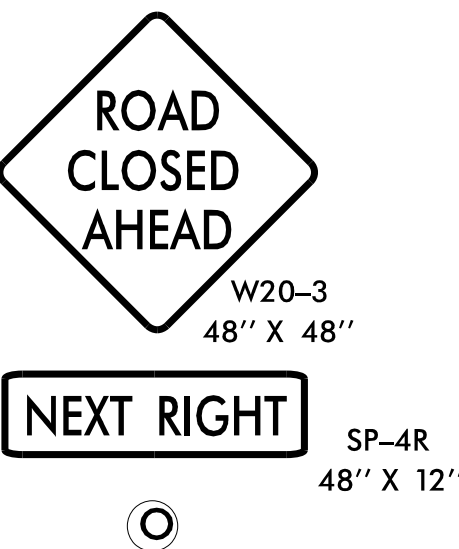
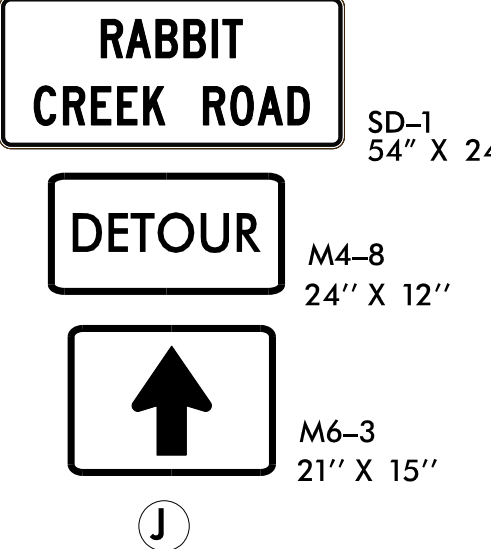
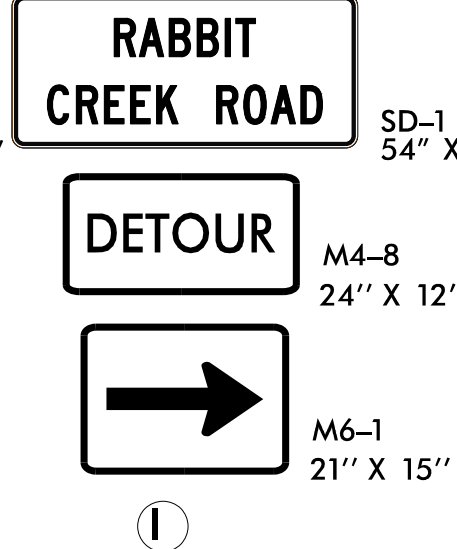
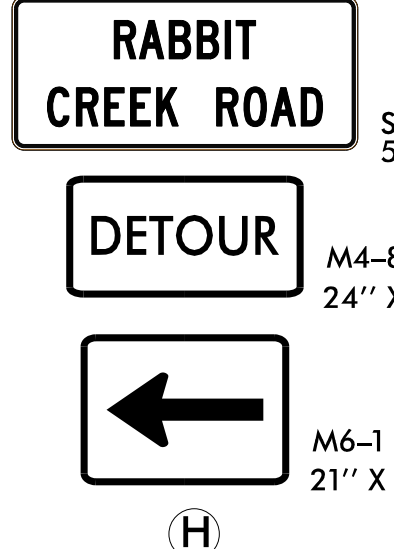
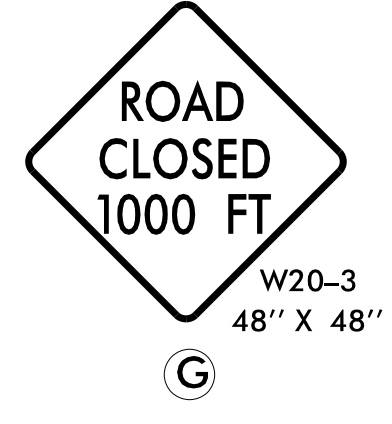
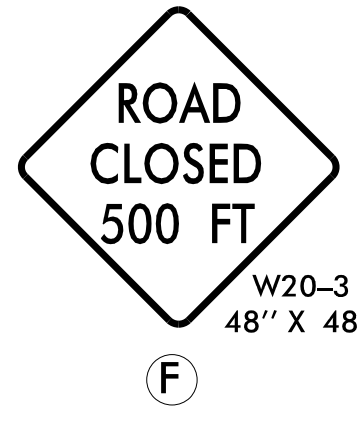
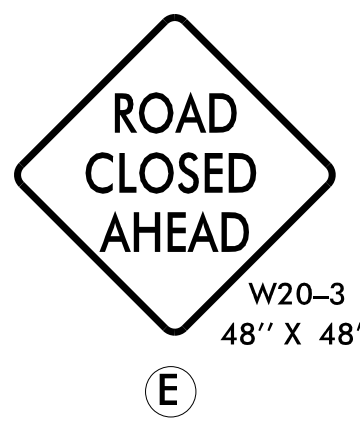
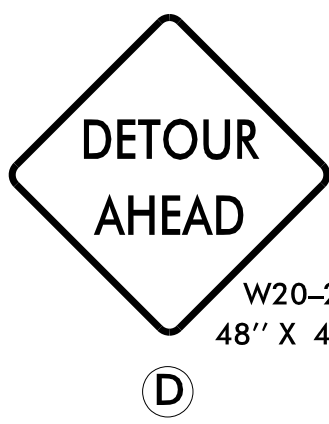
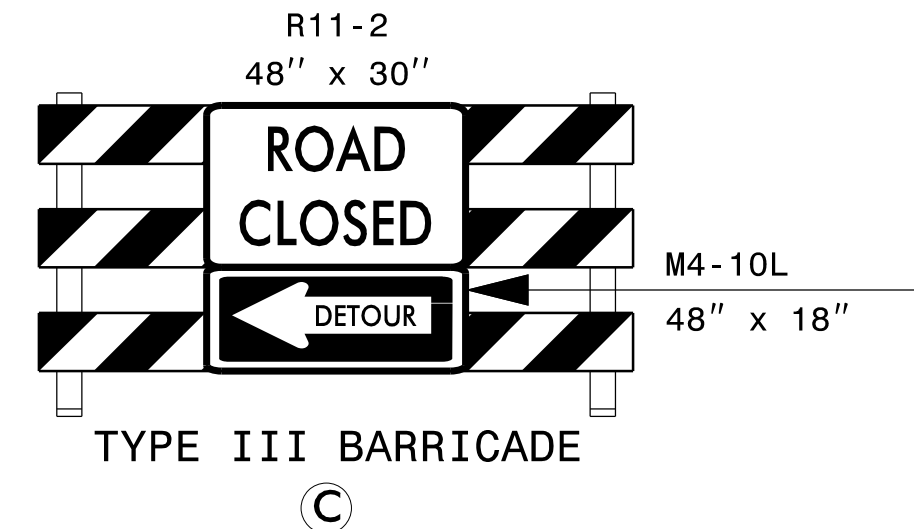
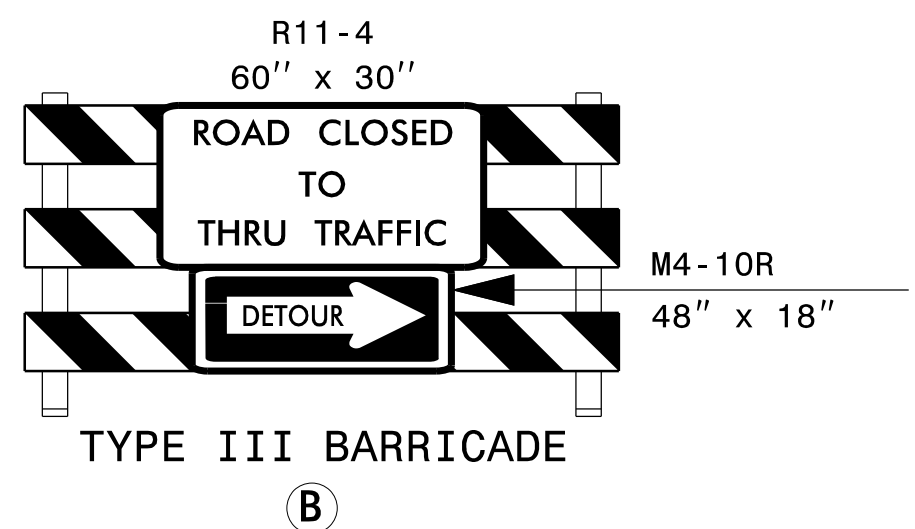
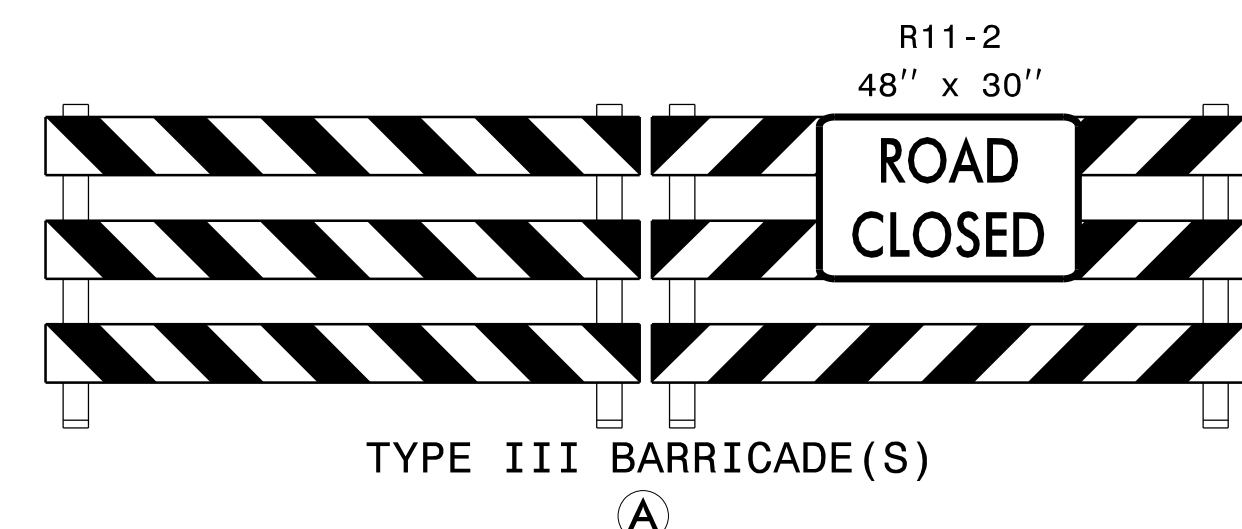
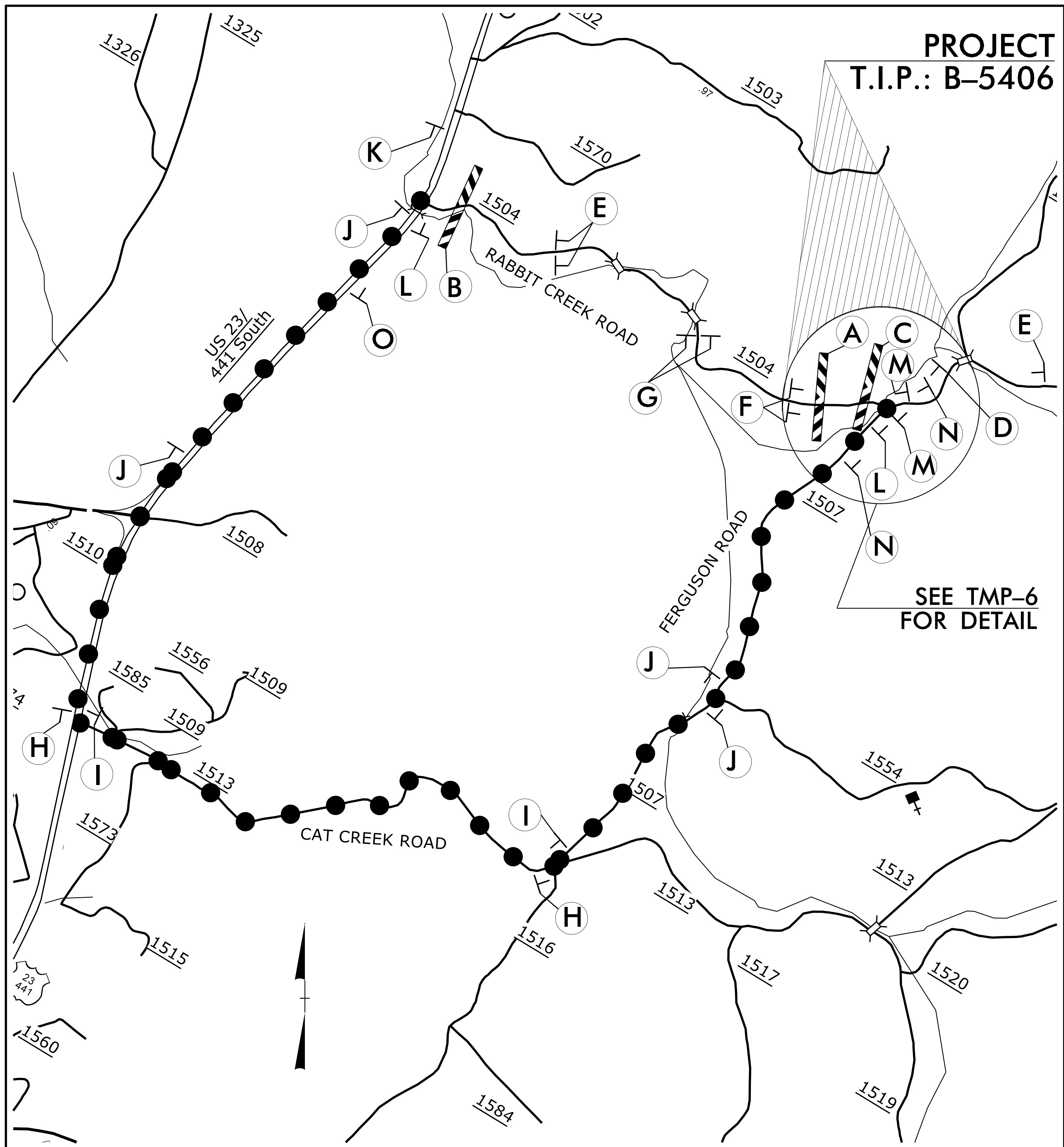


**TEMPORARY TRAFFIC CONTROL PHASE II BRIDGE DETAIL**

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 User:tpobelka





APPROVED: *William J. Hamilton*  
 DATE: 11/29/2017

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**DETOUR SIGNING**

